

**PLANNING FOR PUBLIC HEALTH CARE SYSTEM IN KOLHAPUR
DISTRICT (MAHARASHTRA)**

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ABSTRACT

A Health is important of human being and health care facility is the integral part of medical Geography. The battering standard of living community is health care it is important sector. Public health centers are important role in the health care system emphasizing preventive rather than curative services. There are many health facility located in the study area but Primary health centers is the first one level between individuals, the family and village community to the national health system. This is the close to persons, which is most of their health problems can be dealt and resolved. Here primary health care is a focus on action because it implements overall the national programs, policies and schemes under their public health and family welfare. In these paper the researchers have tried to analyze the distribution of Public health care facilities in Kolhapur district. This is a specific regional unit in terms of physical, cultural and social. The health care is a unequally distribution and available to the community and it is serve large population with very minor resources, as well these areas a right and worry complete planning has been proposed hither to for there are removing imbalance of regional development.

KEYWORDS: Primary Health Centers, Primary Health Sub- Centers, Rural Hospitals and Community Health Centers Family Welfare inventive quantitative techniques, planning very few resources, Public Health.

INTRODUCTION:

India is seventh large country in world and it is a country of villages there are 70 percent population live in rural areas. As a result the real development in of India the village is in development. The main goal of health care planning is to increase and improvement of material man power and financial resources. “The formation of plan for optimum health care system, to cover the entire composition, uneven distribution and inaccessibility of different parts”. (Agnihotri, R.C. 1995).

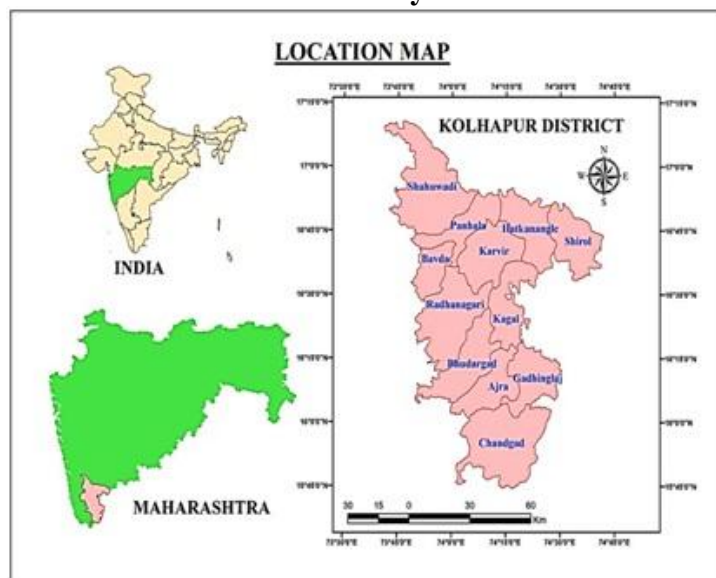
This is an infrastructure, which provides the first level of contact with population and health care providers. Primary health care is affordable, accessible and appropriate care for the particular needs of a given population (Minutha V. and S.S. Sannasiddhannavarat, 2013). “ Primary health care is essential health care made universally accessible to individuals and acceptable to them, through their full participation and at a cost the community and country can afford” (WHO,1971).

STUDY AREA

Kolhapur district of South Maharashtra is selected as a study region for the present investigation. It lies between $15^{\circ} 43'$ and $17^{\circ} 17'$ North latitudes and $73^{\circ} 40'$ and $74^{\circ} 42'$ east longitudes .It covers an area of 7685.00 km², which is 2.50 percent of the total area of the state and a population of 29, 89,457 (19191 census), which is 3.79 percent of the total population of the state. It ranks 24th in area and 10th in population in the state. The region comprising 1188 inhabited villages, and 12 urban centers, It is administratively subdivided into 12 tahsils. It is bounded on the north by Sangli district, on the west by Ratnagiri and Sindhudurg districts and on the south and east by boundary of Karnataka state. The district has long historical and rich cultural background .It is formed after the merger of Kolhapur Princely state.

Fig No. 1.1

Study Area



OBJECTIVE:

To study the Public Health Centers in Kolhapur District of Maharashtra.

DATA BASE AND METHODOLOGY:

The researcher analyze to the available data at various stages is being calculated by using different statistical methods. There were analyzing the viability of data relevant of Public health services in the Kolhapur district. It is geographically accessibility of the health services has been calculated by the using different statistical techniques. The distributional pattern of Public health centers is to be investigation on tahsil level. Here use of data in this chapter related with field survey and statistical abstract of Kolhapur district and social economic review and district statistical department. Population data has been collected for the Census report for the year 2011. There are also use on base map in study area to present the spatial distribution of Public health centers. However the various suggested by different health committees, taking this norms, expected numbers of Public health centers has been calculated. This data collected is processed and presented through simple quantities techniques.

RESULT AND DISCUSSION:

The responsible of Primary Health Centers to aware about national health program in rural India. National rural health mission (NRHM) policy, which is one Primary health centers for group of 30,000 population in plain area and 20,000 population in hilly, backward and tribal area. A Primary Health Centers are playing an important role in providing of Health Care services in rural area. National Family welfare Program is an important the first priority of any government in India. Primary health centers is the first contact level between individual to the family and village community in the national health system. Here it is peoples close where most of their health problems can be dealt and resolved. Primary health care was regarded as synonymous with “basic health services”, “first contact care”, easily accessible care” (Park and Park 2011).

In this region threshold population for health care facility suggested by IPHS. Public health standard here should be a one Community health centers either for 120,000 population or for 4 to 6 Primary health centers in non- tribal area, however in the tribal area threshold population is 80,000 for community health centers. There should as per bed is concern IPHS suggested that behind every 1000 population should have one bed for both non – tribal area and tribal area. Hence purpose of health planning is to meet the health needs and demands of the people it a may be defined as “deficiencies in health that call for preventive, curative, control or eradication measures”. (WHO 1971).

DISTRIBUTION OF PUBLIC HEALTH CENTERS IN KOLHAPUR DISTRICT:

The study area health care facility is unevenly distributed. Plain area has maximum facility, located and hilly and mountain areas have minimum health care facility available respectively. There were Primary health centers, Sub centers, nursing homes and hospitals. It is clearly seen that in the region 73 Primary health centers, 413 Sub centers, 16 Rural Hospitals, 16 Community health centers, 04 Sub District hospital and 01 District hospital are available in Kolhapur district. Kolhapur District having 12 tahsils 02 to 09 PHCs in this region.

Table.1.1

Kolhapur District: Tahsil wise Distribution of Public Health Centers and Ratio of Health Services.

Sr. No	Name of Tahsils	No. of PH Cs	Rural Population	Population per PHCs	Population per Doctors	PHC Per Bed	PHC Medical Officer Ratio
1	Karveer	9	489670	1:54408	1:6565	1:9	1:1.44
2	Panhala	6	256286	1:42714	1:9599	1:8	1:1.17
3	Hatkanangle	9	494530	1:54948	1:17554	1:9	1:1.78
4	Shirol	7	320214	1:45745	1:16296	1:8	1:1.43
5	Kagal	5	230072	1:46014	1:14467	1:7	1:1.00
6	Gadhinglaj	6	198467	1:33078	1:7780	1:8	1:1.33
7	Chandgad	6	187220	1:31213	1:13377	1:7	1:1.67
8	Ajara	4	121922	1:30481	1:23730	1:7	1:1.50
9	Bhudargad	5	150368	1:30076	1:10742	1:7	1:1.00
10	Radhanagari	6	199713	1:33286	1:9510	1:9	1:1.00
11	Gagan Bavada	2	35772	1:17889	1:3578	1:6	1:1.50
12	Shahuwadi	8	179951	1:22494	1:9265	1:7	1:1.13
District Total		73	2864185	1:39236	1:10042	1:8	1:1.34

Source: Calculated Based on Primary Census Abstract, Kolhapur District 2011 and official record of Zilla Parishad Kolhapur.

The table showing is twelve tahsils having in Kolhapur district. There were highly concentration of Primary Health Centers located in Karveer and Hatkanangle tahsils. These two tahsils serving the population at the ratio of 1: 54408 and 1: 54948 and Population per Doctors ratio of 1:6565 and 1:17554 and PHC per bed ratio is 1: 9 both of tahsils equal range located, the health worker medical officer's ration is 1:1.44 and 1:1.78 respectively.

Eight Primary health centers Centre exist in Shahuwadi tahsil there were serving population ratio is 1:22494, Population per doctor's ratio of 1:9265 and bed ratio is 1:7 per PHC, health workforce consist Medical Officers ratio 1:1.13 respectively. Shirol tahsil having seven PHCs with the serving of population ratio is 1: 45745, Bed ratio of 1:8 per PHCs and Work force with doctors and Medical officer's ratio of 1:16296 and 1:1.43 per PHCs located.

Panhala, Gadhinglaj, Chandgad and Radhanagari every tahsils having six PHCs located. Panhala which is followed by Population per PHCs ratio of 1: 42714 and workforce Doctors ratio is 1:9599, bed ratio of 1:8 per PHCs and Medical Officers per PHCs ratio of 1:1.17 respectively. Gadhinglaj tahsil Population per PHCs ratio of 1:33078 and Doctors ratio 1:7780, bed ratio 1:8 per PHCs and Workforce Medical Officers ratio is 1:1.33 located. Chandgad Population per PHCs ratio is 1:31213 and doctor's ratio of 1:13377, bed ratio is 1:7 per PHCs and Medical Officers ratio is 1:1.67 per PHCs respectively. Radhanagari tahsil Population PHCs ratio is 1:33286, Workforce Doctors ratio of 1:9510 and Bed ratio is 1:9 per PHCs and Medical Officers 1:1.00 per PHCs respectively.

Kagal tahsil having five PHCs located Population per PHCs ratio of 1: 46014, Doctors ratio is 1:14467, Bed ratio is 1:7 per PHCs and Medical Officers ratio is 1:1.00 per PHCs respectively. Radhanagari tahsil Population per PHCs ratio of 1:33286, Doctors ratio is 1:9510, Bed ratio 1:9 and Medical Officers ratio per PHCs of 1:1.00 respectively.

In the study region lowest PHCs service facility having Ajara and Gagan Bavada tahsils. Ajara tahsils having four PHCs with the serving facility is the Population ratio is 1:30481, there were workforce Doctors ratio is 1:23730, Bed ratio of 1:7 and Medical Officers ration 1:1.50 located and lastly Gagan Bavada having two PHCs with the service facility is Population per PHCs ratio is 1:17889, Doctors ratio is 1:3578, Bed ratio of 1:6 and Medical Officers per PHCs ratio is 1:1.50 respectively.

The table 1.1 shows there were plain area highly service facility located and hilly area is low facility located. Both type of region is comparatively study in this region very easily. Another side study observed that is high population but there is no available Public health centers services are less according to norms suggested as government authority. Hence it is observed that regional imbalance in the distribution of Public health care centers among the tahsils of Kolhapur District.

Table-1.2

Kolhapur District: Tahsil wise Distribution of Projected Rural Population

Sr. No.	Name of Tahsil	Rural Population 2011	Projected Rural Population 2021
1	Karveer	489670	579592
2	Panhala	256286	279582
3	Hatkanangle	494530	569724
4	Shirol	320214	347837
5	Kagal	230072	244907
6	Gadhinglaj	198467	206334
7	Chandgad	187220	193888
8	Ajara	121922	139471
9	Bhudargad	150368	156032
10	Radhanagari	199713	212035
11	Gagan Bavada	35772	39343
12	Shahuwadi	179951	188978
District Total		2864185	3158723

Source: Calculation Based on Primary Census Abstract, Kolhapur District, 2011

Note: Including Rural Population of Census Town

The projected population is 2864185 is 2011 located as comparer 2021 projected population is 3158723 located. Population increase more than ten percent by the year 2021. There were simply help to projected new health care service centers and regarding future increase in the population. Any long term planning approach may not be realistic without any estimation of future population (Agnihotri, 1995)¹⁷ here estimate of health care facilities, tahsil wise projected population is calculated with the help of Geometric Projection

(George, Smith, et.al., 2004), ¹⁸for that firstly Average Geometric Rate of population was calculated and then according to this rate projected additional population has been calculated. However this calculated, examines of the Public health care services are adequate to the population needs are not, there are newly suggested regarding to existing as well as future population for serve continues health care facilities to the rural areas very effective.

Table – 1.3

Kolhapur District: Tahsil wise Distribution of Public Health Care Centers and Requirement of PHCs

Sr. No.	Name of Tahsil	No. Of PHCs 2011	No. of SCs 2011	No. of CHCs 2011	No. of RHs 2011	Requirement of Public Health Centers			
						PHCs 2021	SCs 2021	CHCs 2021	RHs 2021
1	Karveer	9	50	1	1	10	48	4	1
2	Panhala	6	40	1	1	3	10	1	2
3	Hatkanangle	9	46	2	2	10	53	3	2
4	Shirol	7	33	2	2	5	31	1	2
5	Kagal	5	34	2	1	3	12	-	2
6	Gadhinglaj	6	35	1	1	1	5	1	2
7	Chandgad	6	33	1	1	-	4	-	3
8	Ajara	4	27	1	1	1	-	-	2
9	Bhudargad	5	30	1	1	-	-	-	3
10	Radhanagari	6	38	2	2	1	-	-	2
11	Gagan Bavada	2	9	1	1	1	-	-	2
12	Shahuwadi	8	38	1	2	-	-	1	2
District Total		73	413	16	16	53	163	12	25

Source: Calculation Based on Primary Census Abstract official record of Zillah Parishad Kolhapur 2011.

The table 1.3 shows Requirement of Public health care facility in the study area. Here observed 2011 and 2011 in the year comparatively studied of the given data, and future planning of health care facility. There are required number of Primary health centers, Sub – Centers Community Health Centers and Number of Rural Hospitals have aching the balance in this region development in health facility till 2021, considering the number of Public

health care facilities current status in 2021. This will help with the strategy maker, planner and administrator for allotment of time to health facilities in Kolhapur District. Considering the current situation in the year 2011 there are 73 primary health centers, 413 Sub- Centers, 16 Community Health Centers, 16 Rural Hospitals located in this region. Here calculation of quantitative technique helpful requirement of future Public Health Care Centers respectively. It is expected of requirement of new 53 Primary health Centers, 163 Sub Centers, 12 Community Health Centers and 16 Rural Hospitals available in this region. This is a accessing the additional requirement of facility within the complementary region and direction of new location and there attend a balanced regional development.

CONCLUSION

The study area considering the existing and Additional requirement of Public Health Care Centers and curative services are organized as per requirement of future plan the health status of the community of the study region improvement successfully. To improve the quality of life, horizontal and vertical links must be established all of interrelated events of them are nutrition water supplies, environmental hygiene, education, family planning maternity and child welfare in complimentary territory throw Public Health Centers.

Overall studied the region firstly understand it may be stated that required Public health care centers services of Kolhapur district. Will have established successfully with quality and faith, will be provided healthful living to the people by 2021 AD and we have expected the region complete healthful and happiness. In this region unevenly distribution of Public health care centers there are many causes by physiographic condition, economical situation, political issues of the district and social condition in region. Wherever need have new established of Public Health Care facility in the study area.

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